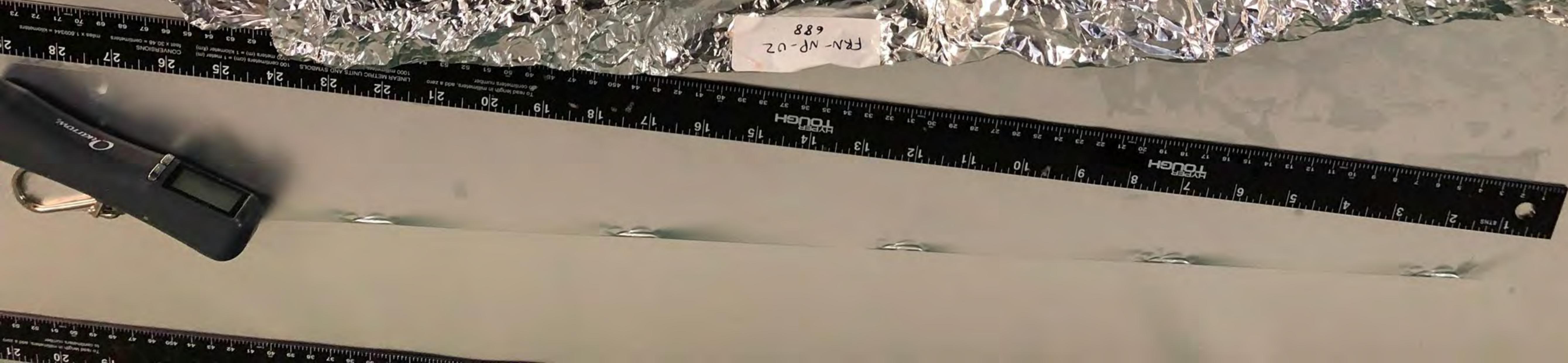


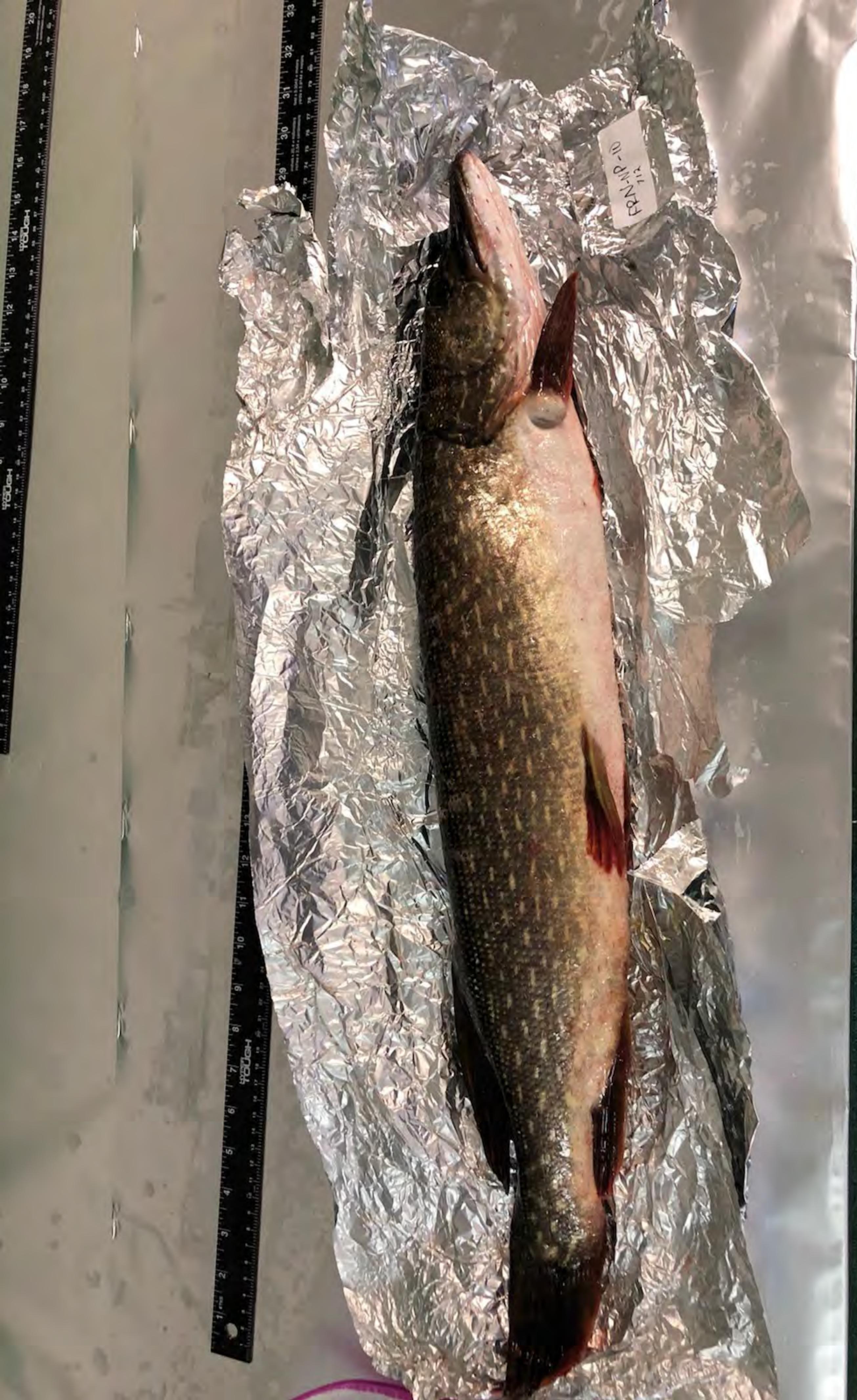




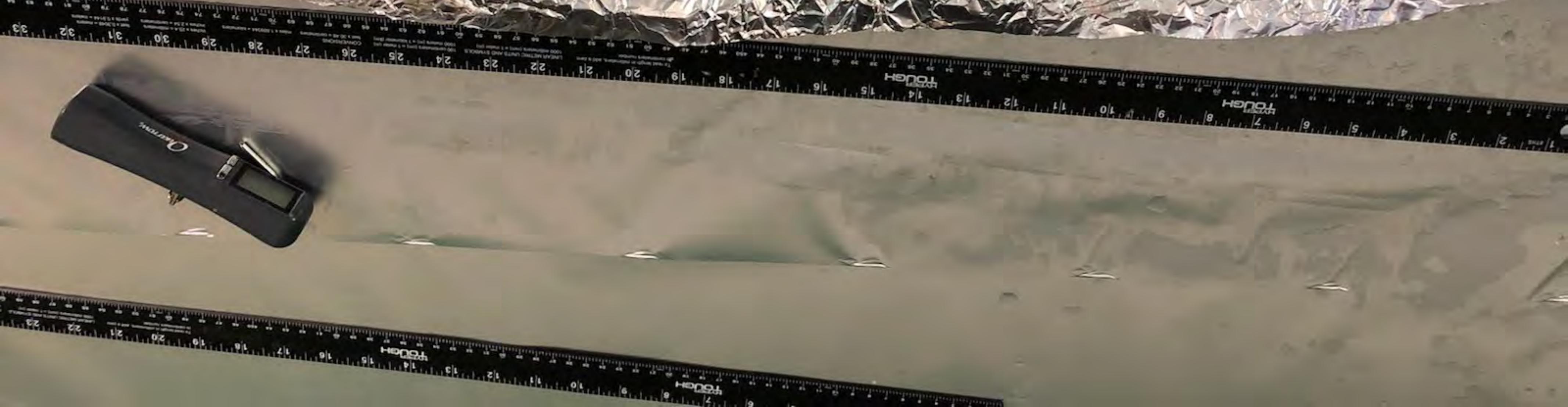
FRN-NP-UZ
688

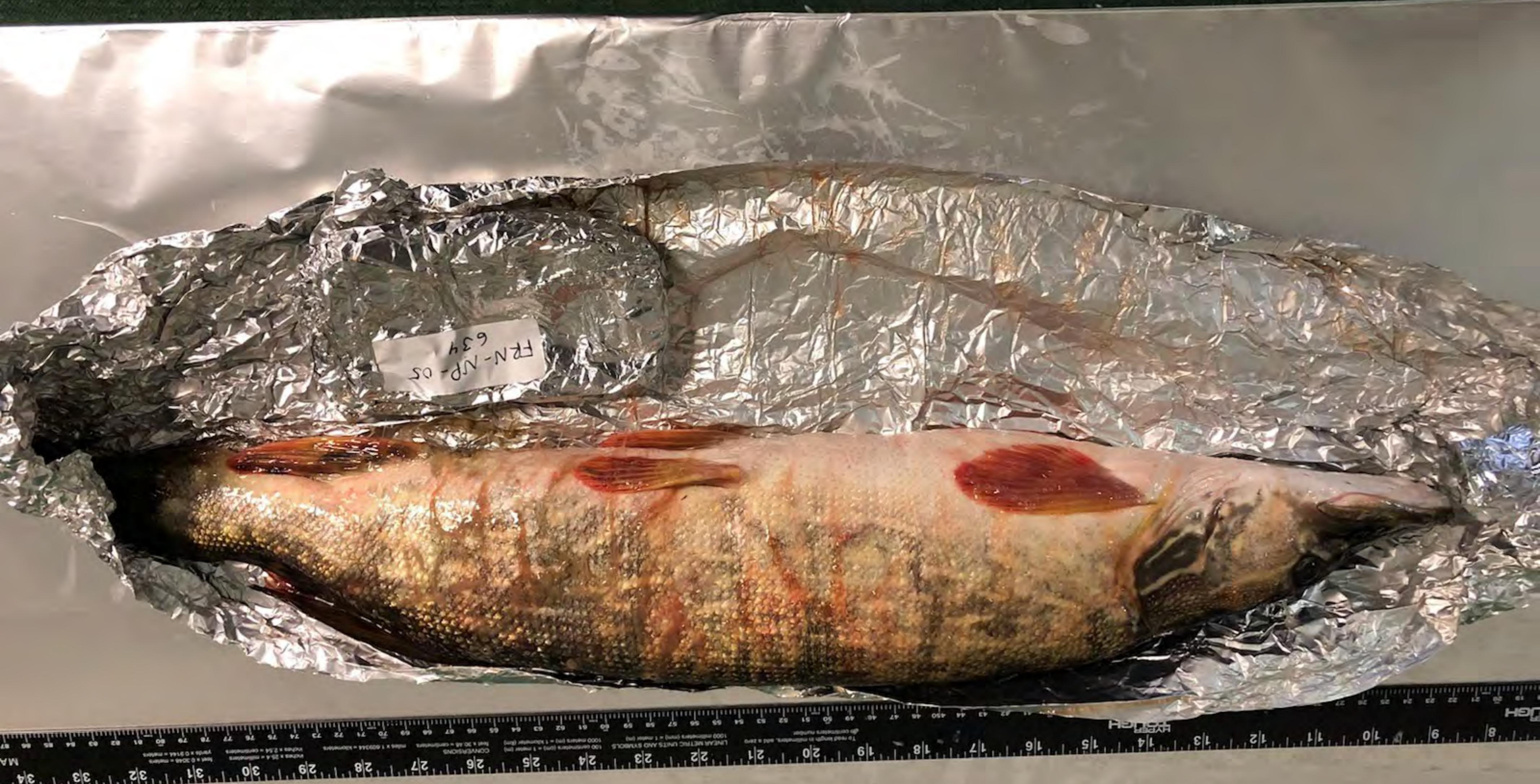






610
PRN-NP-01





MA 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8

DEPTH

TO READ LENGTH IN MILLIMETERS, DIVIDE BY 2.54
1000 MILLIMETERS (100 CM) = 1 METER (1M)
100 MILLIMETERS (10 CM) = 1 DECI-METER (10 CM)
10 MILLIMETERS (1 CM) = 1 CENTI-METER (10 MM)
1 MILLIMETER (1 MM) = 1 MILI-METER (1 MM)



FRN-NP-09
600

FRN-NP-03
584



To read length in millimeters, add 2000.
1000 millimeters (mm) = one meter (m)
1000 meters = one kilometer (km)

5



FRN-NP-07
S76

14
13
12
11
10
9
8
7
6
5
4
3
2
1
0



180 GR

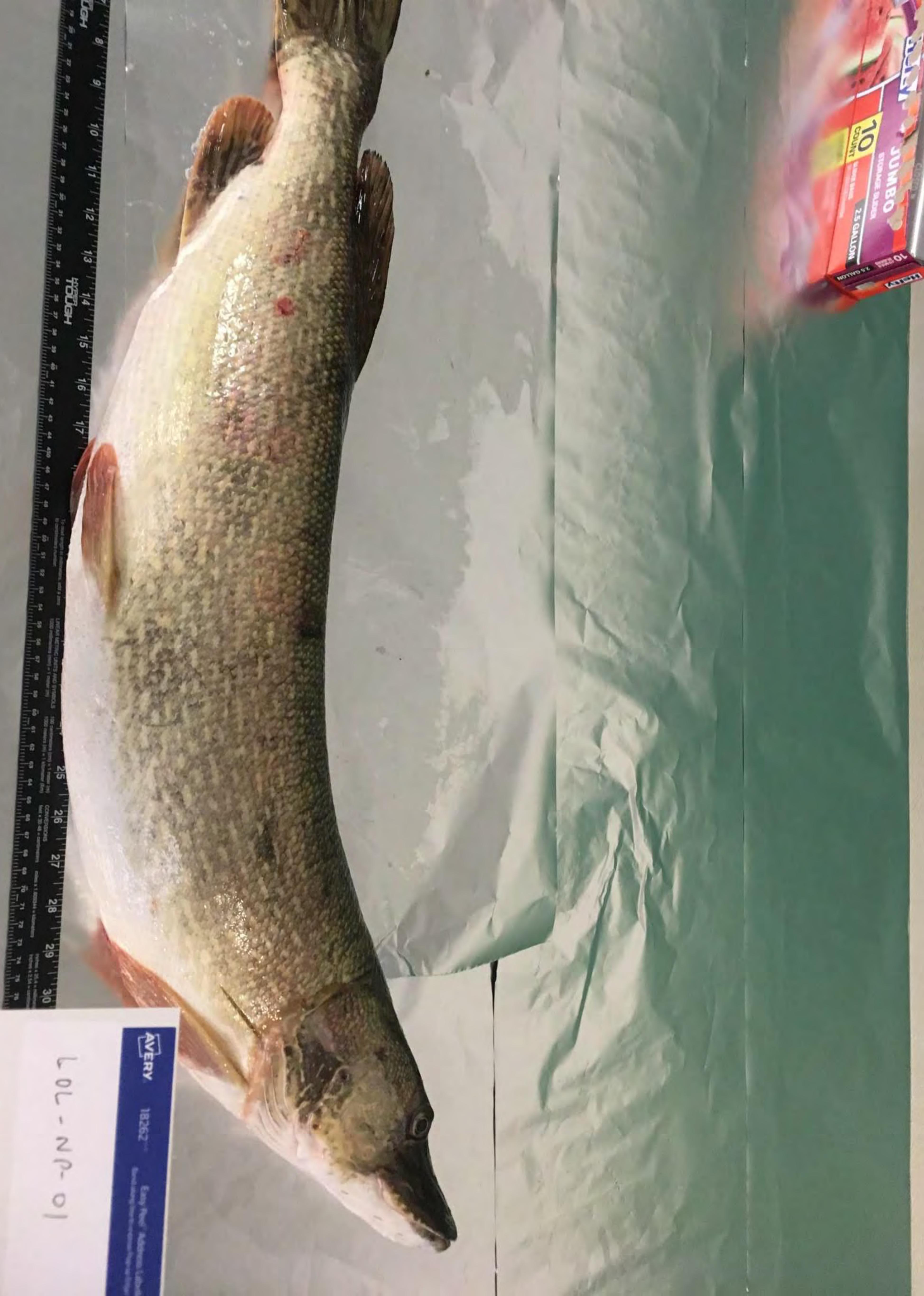
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



FRN-NP-06
564







AVERY

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Heavy Duty
Aluminum Foil
120

Camp

100

2 Location Frenchtown Date 6/17/19
Project / Client Smurfit SRC
R. Sordan, J. Welch, S. Grant

11:30 Arrived @ Kelly Island FAS, waiting to receive fish from boat

14:10 MFWP motor is broken, meeting them @ Owl Summit way

14:30 Arrive @ Owl Summit

15:45 MFWP boat out of water. Transfer fish from live well on boat to fish car on river.

16:45 Complete packing samples LOL-NP-01 through LOL-NP-20

16:55 Depart site to ^{Scallopina} drop head to hotel

17:20 Arrive at hotel. End of day.

~~9/20/19~~

Location Frenchtown Date 6/17/19 SCR 6/18/19
Project / Client Smurfit SRC
Scale S. Grant, J. Welch, R. Sordan, J. Rothrock 80°F, Suny
Began fish processing NP=northern pike
1) LOL-NP-03 - LOL reach of Bitterroot River.
947 Visit 1, HUC: 17010205 Missoula County.
Esox lucius, electroshocked.
Whole fish total length: 750 mm
Fillet weight: 1604 g
Carcass weight: 1720 g
Scaled fish rinsed with distilled water to remove scales. Internal organ was punctured. Fillets rinsed with ASTM Type I water.
Resort time: 947 to ~~1115~~ 1115
2) LOL-NP-02 - LOL reach of Bitterroot River.
1137 Visit 1, HUC 17010205, Missoula County.
Esox lucius, electroshocked.
Whole fish total length: 850 mm
Fillet weight: 2440 g
Carcass weight: 3120 g
Scaled fish rinsed with distilled water + remove scales + slime. No internal punctures.
Fillets rinsed with ASTM Type I water -
time for resort: 1137-1228 Rate in the rain

4 Location Missoula / Superior, MT Date 6/18/19
 Project / Client Smurfit SRC
 S. Grant, J. Welch, R. Jordan, J. Rothrock 80°F, Sunny

1430 LOL-NP-01. Lol reach of Bitterroot. 930 mm total length
 6440 g total weight, 3574 g fillet weight, 3534 g
 Carcass weight. Scaled fish rinsed with distilled water
 to remove scales. Internal organs punctured during
 fillet. Rinsed with Type I water. Minor red
 splotch on left side. Minor abrasion on right
 Side of fish.

1545 LOL-NP-10. Lol reach of Bitterroot. 880 mm total length.
 1260 g total weight, 554 g fillet weight, 736 g carcass weight
 Scaled fish rinsed w/ distilled water to remove scales.

1645 LOL-NP-18. Lol reach of Bitterroot. 300 mm total length
 900 g total weight, 396 g fillet weight, 482 g carcass weight
 Scaled fish rinsed with distilled water. Fillets rinsed
 with ASTM Type I water.

1725 LOL-NP-17. Lol reach of Bitterroot. 470 mm total length.
 780 g total weight, 364 g fillet weight, 384 g carcass weight
 Scaled fish rinsed with distilled water. Fillets rinsed
 with ASTM Type II water.

1755 LOL-NP-20. 630 mm total length. Lol reach of Bitterroot.
 2600 g total weight, 840 g fillet weight, 1172 g carcass weight
 Scaled fish rinsed with distilled water. Internal organ punctured
 Fillet rinsed with ASTM Type II water.

1800 LOL-NP-09. Lol reach of Bitterroot. 670 mm total Length
 884 g fillet weight, 2120 total weight, 1136g Carcass weight
 Scaled fish rinsed w/ distilled. Fillets rinsed w/ Type I.

Location Missoula / Superior, MT Date 6/18/19
 Project / Client Smurfit SRC
 S. Grant, J. Welch, R. Jordan, J. Rothrock 83°F, Sunny

1830 LOL-NP-19. Lol reach of bitterroot. 550 mm total length
 444 g fillet weight, 1150 g total, 754 g carcass
 Scaled fish rinsed with distilled, fillet w/ Type I

1850 LOL-NP-10. 660 mm total length. 1086g fillet, 2120g
 58 g total weight, 1246g carcass. Scaled fish rinsed w/
 distilled, fillets rinsed w/ Type I

1905 LOL-NP-08. 610 mm total length. 7485 g fillet, 1730 g
 total weight, 954 g carcass. Scaled fish rinsed w/
 distilled, fillets rinsed w/ Type I.

1925 LOL-NP-07. 650mm total length. 1050g fillets, 2720
 total weight, 1620 g carcass. Scaled fish rinsed w/ distilled
 to fillets rinsed w/ Type I.

1950 Begin cleanup of office.
 2020 End of field office work.



6 Location Superior, MT Date 6/19/19
 Project / Client Smurfit SRC
 R.Jordan S.Grant J.Wilson

- 0745 Sample Labels from Yesterday:
 • Sample #: 47724-589, 6-18-19, 1405
Field Blank 01 Sampler: D.Schnellatty
 • Sample #: 47724-575 6-18-19 1350
Processing Resite 01 Sampler: R.Jordan
 • Sample #: 47724-5601 6-18-19 1400
Rinsate Blank 01 Sampler: R.Jordan
- 0800 Sample #: 47724-597 Wipe 02
 6-19-19 0734 R.Jordan
 Sample #: 477-596 Wipe 01
 6-19-19 0732 R.Jordan
- 1220 R.Jordan corrected Sample trace on
 LOC form for LOL-NP
- 755 LOL-NP-06, LOL section of Bitterroot, 770 mm total length
 3440g total, 1642g fillet, 2278g carcass. Small abrasion
 on left side. Scaled fish rinsed with distilled and
 fillets rinsed with ASTM Type I.
- 830 LOL-NP-05, 770 mm total length, 3850g total, 1628g
 fillet, 2056g carcass. Small abrasion of right side. Scaled
 fish rinsed w/ distilled + fillets rinsed w/ ASTM Type I.
- 905 LOL-NP-04, 760mm total length, 3040g total weight, 1402g
 fillet, 1606g carcass. Puncture of gall bladder during fillet.
- 935 LOL-NP-14, 550 mm total length, 1203g total, 940g fillet
 716g carcass. Scaled fish rinsed with distilled + fillets
 rinsed w/ ASTM Type I, as was LOL-NP-04

Location Superior, MT Date 6/19/19
 Project / Client Smurfit SRC
 Scale R. Jordan, S. Grant, S. Wilson

Temp ID	Sample ID	Sample Date	Sample Time
LOL-NP-03	LOL-NP-FT-03-C1	6/17/19	1545
LOL-NP-02	LOL-NP-CT-03-C1	6/17/19	
LOL-NP-01	LOL-NP-FT-02-C1		
LOL-NP-16	LOL-NP-CT-02-C1		
LOL-NP-18	LOL-NP-FT-04-C1		
LOL-NP-17	LOL-NP-CT-04-C1		
LOL-NP-20	LOL-NP-FT-05-C1		
LOL-NP-09	LOL-NP-CT-05-C1		
LOL-NP-19	LOL-NP-FT-03-C2		
LOL-NP-10	LOL-NP-CT-03-C2		
LOL-NP-08	LOL-NP-FT-04-C2		
LOL-NP-07	LOL-NP-CT-02-C2		
LOL-NP-06	LOL-NP-FT-05-C1		
LOL-NP-05	LOL-NP-CT-05-C1		
LOL-NP-04	LOL-NP-FT-04-C1		
LOL-NP-14	LOL-NP-CT-01-C2		
LOL-NP-15	LOL-NP-FT-02-C4		
LOL-NP-13	LOL-NP-CT-04-C3		
LOL-NP-12	LOL-NP-FT-01-C3		
LOL-NP-11	LOL-NP-CT-03-C3		
FRN-RB-04	FRN-RB-FT-01-C1	6/18/19	1340
FRN-RB-02	FRN-RB-CT-01-C1		
FRN-RB-07	FRN-RB-FT-03-C1		
FRN-RB-03	FRN-RB-CT-02-C1		
FRN-RB-08	FRN-RB-FT-01-C1		
FRN-RB-19	FRN-RB-FT-04-C1		
FRN-RB-18	FRN-RB-CT-04-C1		
FRN-RB-01	FRN-RB-FT-03-C2		

Rite in the Rain

8 Location Superior, MT

Date 6/19/19

Project / Client Smurfit SRC

R. Jordan, S. Grant, S. Welch

- 1005 LOL-NP-15. 560mm total length, 1480g total, 618g fillet, 778g carcass. Scaled fish rinsed w/ distilled + fillets rinsed w/ ASTM Type I.
- 1025 LOL-NP-13. 560 mm total length, 1400g total, 634g fillet, 764g carcass. Scaled fish rinsed w/ distilled + fillets rinsed w/ ASTM Type I.
- 1055 LOL-NP-1350-12. 630 mm total length, 1940g total, 828g fillet, 1018g carcass. Scaled fish rinsed w/ distilled + fillets rinsed w/ ASTM Type I.
- 1120 LOL-NP-11. 570 mm total length, 1590g total weight 588g fillet, 998g carcass.
- 1140 Clean up after completing LOL reach northern pike. Begin labelling composite samples and repackaging. Prep tables for next round of fish. Decor all cutting boards, knives, scalers, scales, cookie sheets.
- 1540 Begin resection of FRN rainbow trout from Clark Fork River. FRN = Frenchtown beach
RB = rainbow trout FT = fillet tissue CT = carcass tissue
C = composite. FRN-RB-04. 450 total length, 790g total
322g fillet, 478g carcass. Scaled fish listed below were rinsed w/ distilled water + the fillets rinsed w/ ASTM Type I.
- 1615 FRN-RB-02. 426mm total length, 765g total, 310g fillet 428g carcass.
- 1635 FRN-RB-07. 412mm total length, 610g total, 284g fillet, 320g carcass weight.

Location Superior, MT

Date

6/19/19 + 6/20/19

Project / Client Smurfit SRC

R. Jordan, S. Grant, S. Welch

Temp ID	Sample ID	Sample Date
FRN-RB-16	FRN-RB-FT-05-C2	6/19/19
	FRN-RB-CT-05-C2	
FRN-RB-17	FRN-RB-FT-01-C3	
	FRN-RB-CT-01-C3	
FRN-RB-15	FRN-RB-FT-02-C3	
	FRN-RB-CT-02-C3	
FRN-RB-11	FRN-RB-FT-03-C3	
	FRN-RB-CT-03-C3	
FRN-RB-14	FRN-RB-FT-04-C3	
	FRN-RB-CT-04-C3	
FRN-RB-09	FRN-RB-FT-05-C3	
	FRN-RB-CT-05-C3	
FRN-RB-06	FRN-RB-FT-01-C4	
	FRN-RB-PT-01-C4	
FRN-RB-10	FRN-RB-FT-02-C4	
	FRN-RB-PT-02-C4	
FRN-RB-12	FRN-RB-FT-03-C4	
	FRN-RB-CT-03-C4	
FRN-RB-13	FRN-RB-FT-04-C4	
	FRN-RB-CT-04-C4	
FRN-RB-05	FRN-RB-FT-05-C4	
	FRN-RB-CT-05-C4	
FRN-NP-01	FRN-NP-FT-01-C1	
	FRN-NP-CT-01-C1	
LOL-RB-20	LOL-RB-FT-01-C1	6/19/19
	LOL-RB-CT-01-C1	
LOL-RB-03	LOL-RB-FT-02-C1	
	LOL-RB-CT-02-C1	
LOL-RB-16	LOL-RB-FT-03-C1	
	LOL-RB-CT-03-C1	
LOL-RB-19	LOL-RB-FT-04-C1	
	LOL-RB-CT-04-C1	
LOL-RB-04	LOL-RB-FT-05-C1	
	LOL-RB-CT-05-C1	
LOL-RB-13	LOL-RB-FT-01-C2	
	LOL-RB-CT-01-C2	
LOL-RB-14	LOL-RB-FT-02-C2	
	LOL-RB-CT-02-C2	
LOL-RB-01	LOL-RB-FT-03-C2	
	LOL-RB-CT-03-C2	
LOL-RB-02	LOL-RB-FT-04-C2	
	LOL-RB-CT-04-C2	
LOL-RB-10	LOL-RB-FT-05-C2	
	LOL-RB-CT-05-C2	
LOL-RB-06	LOL-RB-FT-01-C3	
	LOL-RB-CT-01-C3	
LOL-RB-09	LOL-RB-FT-02-C3	
	LOL-RB-CT-02-C3	
LOL-RB-12	LOL-RB-FT-03-C3	
	LOL-RB-CT-03-C3	
LOL-RB-17	LOL-RB-FT-04-C3	
	LOL-RB-CT-04-C3	
LOL-RB-15	LOL-RB-FT-05-C3	
	LOL-RB-CT-05-C3	
LOL-RB-05	LOL-RB-FT-01-C4	
	LOL-RB-CT-01-C4	
LOL-RB-08	LOL-RB-FT-02-C4	
	LOL-RB-CT-02-C4	

Rite in the Rain

10 Location Missoula / Superior, MT

Date 6/19/19

Project / Client Smurfit SRC

R. Jordan, S. Crant, J. Welch

1650 FRN-RB-03, 398 mm total length, 250g fillet, 60g total
390g carcass.

1700 FRN-RB-08, 366mm total length, 480g total, 260g fillet, 250g
carcass weight.

1713 FRN-RB-19, 364mm total length, 520g total, 290g fillet, 260g carcass

1730 FRN-RB-18, 354mm total length, 470g total, 254g fillet, 269g carcass

1740 FRN-RB-01, 342mm total length, 410g total, 210g fillet, 212g carcass

1755 FRN-RB-16, 356mm total length, 520g total, 234g fillet, 260g carcass

1810 Begin cleaning up lab for the night.

1837 Depart Superior field office. End of office work.

~~6/19/19~~

Location Missoula / Superior, MT

Date 6/20/19

Project / Client Smurfit SRC

R. Jordan, S. Crant, J. Welch

Temp ID	Sample ID	Sample Date	Sample Time
LOL-RB-08	LOL-RB-FT-02-C4	6/19/19	9:00
LOL-RB-07	LOL-RB-CT-02-C4		
LOL-RB-18	LOL-RB-FT-03-C4		
LOL-RB-11	LOL-RB-CT-03-C4		
MIS-RB-12	MIS-RB-FT-01-C1	6/19/19	
MIS-RB-06	MIS-RB-FT-02-C1		
MIS-RB-15	MIS-RB-CT-02-C1		
MIS-RB-14	MIS-RB-FT-04-C1		
MIS-RB-18	MIS-RB-CT-05-C1		
MIS-RB-17	MIS-RB-FT-01-C2		
MIS-RB-08	MIS-RB-FT-02-C2		
MIS-RB-05	MIS-RB-FT-03-C2		
MIS-RB-11	MIS-RB-FT-04-C2		
MIS-RB-16	MIS-RB-CT-05-C2		
MIS-RB-01	MIS-RB-FT-01-C3		
MIS-RB-19	MIS-RB-CT-01-C3		
MIS-RB-09	MIS-RB-FT-02-C3		
MIS-RB-02	MIS-RB-FT-03-C3		
MIS-RB-20	MIS-RB-FT-05-C3		
MIS-RB-04	MIS-RB-CT-05-C4		
MIS-RB-07	MIS-RB-FT-01-C4		
MIS-RB-13	MIS-RB-FT-02-C4		
MIS-RB-03	MIS-RB-FT-04-C4		
MIS-RB-10	MIS-RB-CT-01-C4		
STR-RB-19	STR-RB-FT-01-C1	6/20/19	11:30
STR-RB-15	STR-RB-FT-02-C1		
STR-RB-18	STR-RB-CT-02-C1		
STR-RB-11	STR-RB-FT-03-C1		
STR-RB-12	STR-RB-FT-04-C1		
	STR-RB-CT-04-C1		
	STR-RB-FT-05-C1		
	STR-RB-CT-05-C1		

Rite in the Rain

12 Location Missoula / Superior, MT

Date 6/20/19

Project / Client Snurfit SRC

R. Jordan, S. Great, J. W. Ich

- 800 Arrive at Superior field office. Set up lab for sample processing.
- 830 FRN-RB-17, 348mm total length, ^{50.621g} 488g total, 212g fillet, 286g carcass. Samples reweighed due to field sheet transcription error
Carcass weight
- 850 FRN-RB-15, 332mm total length, 330g total, 188g fillet, 162g carcass
- 910 FRN-RB-11, 320mm total length, 360g total, 172g fillet, 174g carcass weight
- 925 FRN-RB-14, 318mm total length, 330g total, 172g fillet, 160g carcass
- 940 FRN-RB-04, 310mm total length, 290g total, 148g fillet, 144g carcass
- 955 FRN-RB-06, 304mm total length, 249g total, 130g fillet, 156g carcass
- 1015 FRN-RB-10, 300mm total length, 290g total, 156g fillet, 124g carcass
- 1030 FRN-RB-12, 280mm total length, 230g total, 120g fillet, 122g carcass
- 1045 FRN-RB-13, 280mm total length, 280g total, 128g fillet, 110g carcass
- 1105 FRN-RB-05, 272mm total length, 210g total, 118g fillet, 94g carcass
- 1120 FRN-NP-01, 790 total length, 4240g total, 2114g fillet, 2004g carcass
- 1155 Complete resection from FRN reach. Clean all instruments and rewarp all totals for next reach processing.
- 1350 Begin LOL-RB. LOL = Lolo reach, KB = rainbow trout C7 = ^{carcass} tissue FT = Fillet tissue C = Composite All scaled fish were rinsed w/
distilled water & fillets w/ASTM Type I water. Note - FRN-RP-01 had small abrasion on right side. LOL-RB-20, 430mm total length
728g total, 372g fillet, 360g carcass
- 1410 LOL-RB-03, 420mm total length, 660g total, 340g fillet, 340g carcass
- 1430 LOL-RB-16, 410mm total length, 650g total, 298g fillet, 316g carcass
- 1447 LOL-RB-19, 380mm total, 650g total, 308g fillet, 308g carcass
- 1450 LOL-RB-04, 400mm total, 510g total, 252g fillet, 264g carcass

Location Superior / Missoula, MT

Date 6/1/19

Project / Client Snurfit SRC

Scale

Temp FD

STR-RB-20

STR-RB-10

STR-RB-09

STR-RB-17

STR-RB-16

STR-RB-13

STR-RB-14

STR-RB-19^{SG} 08

STR-RB-01

STR-RB-07

STR-RB-04

STR-RB-05

STR-RB-06

STR-RB-02

STR-RB-03

STR-RB-15

STR-RB-06

STR-RB-02

STR-RB-03

STR-RB-15

C06-RB-06

C06-RB-15

C06-RB-17

C06-RB-20

C06-RB-12

C06-RB-19

C06-RB-14

C06-RB-10

C06-RB-02

C06-RB-19

C06-RB-14

C06-RB-10

C06-RB-02

C06-RB-16

C06-RB-18

C06-RB-05

C06-RB-13

C06-RB-11

C06-RB-FT-02-C2

C06-RB-CT-02-C2

C06-RB-FT-03-C3

C06-RB-CT-03-C3

C06-RB-FT-03-C3

C06-RB-CT-03-C3

Sample ID

STR-RB-FT-01-C2

STR-RB-CT-01-C2

STR-RB-FT-02-C2

STR-RB-CT-02-C2

STR-RB-FT-04-C2

STR-RB-CT-04-C2

STR-RB-FT-05-C3

STR-RB-CT-05-C3

STR-RB-FT-03-C3

STR-RB-CT-03-C3

STR-RB-FT-01-C3

STR-RB-CT-01-C3

STR-RB-FT-05-C3

STR-RB-CT-05-C3

STR-RB-FT-01-C4

STR-RB-CT-01-C4

STR-RB-FT-02-C4

STR-RB-CT-02-C4

STR-RB-FT-03-C4

STR-RB-CT-03-C4

STR-RB-FT-04-C4

STR-RB-CT-04-C4

STR-RB-FT-05-C4

STR-RB-CT-05-C4

STR-RB-FT-06-C4

STR-RB-CT-06-C4

STR-RB-FT-07-C4

STR-RB-CT-07-C4

STR-RB-FT-08-C4

STR-RB-CT-08-C4

STR-RB-FT-09-C4

STR-RB-CT-09-C4

STR-RB-FT-10-C4

STR-RB-CT-10-C4

STR-RB-FT-11-C4

STR-RB-CT-11-C4

STR-RB-FT-12-C4

STR-RB-CT-12-C4

STR-RB-FT-13-C4

STR-RB-CT-13-C4

STR-RB-FT-14-C4

STR-RB-CT-14-C4

STR-RB-FT-15-C4

STR-RB-CT-15-C4

Date
6/20/19Time
1130

6/21/19

1030

Rite in the Rain

12 Location Missoula / Superior, MT

Date 6/20/19

Project / Client Snurfit SRC

R. Jordan, S. Correa, J. Welch

- 800 Arrive at Superior field office. Set up lab for sample processing.
- 830 FRN-RB-17, 348mm total length, ^{50% fillet} 488g total, 212g fillet, 296g carcass. Samples reworked due to field sheet transcription error
Carcass weight
- 850 FRN-RB-15, 332mm total length, 330g total, 188g fillet, 142g carcass
- 910 FRN-RB-11, 320mm total length, 360g total, 172g fillet, 174g carcass weight
- 925 FRN-RB-14, 318mm total length, 330g total, 172g fillet, 160g carcass
- 940 FRN-RB-04, 310mm total length, 290g total, 148g fillet, 144g carcass
- 955 FRN-RB-06, 304mm total length, 249g total, 130g fillet, 156g carcass
- 1015 FRN-RB-10, 300mm total length, 290g total, 156g fillet, 124g carcass
- 1030 FRN-RB-12, 280mm total length, 230g total, 120g fillet, 122g carcass
- 1045 FRN-RB-13, 280mm total length, 280g total, 128g fillet, 110g carcass
- 1105 FRN-RB-05, 272mm total length, 210g total, 118g fillet, 94g carcass
- 1120 FRN-NP-01, 790 total length, 4240g total, 2114g fillet, 2004g carcass
- 1155 Complete resection from FRN reach. Clean all instruments and rewrap all tables for next reach processing.
- 1350 Begin LOL-RB. LOL = Lolo reach, KB = rainbow trout CTZ (carcass)
FT = fillet tissue C = composite All scaled fish were rinsed w/
distilled water & fillets w/ASTM Type I water. Note - FRN-RP-01
had small abrasion on right side. LOL-RB-20, 430mm total
728g total, 372g fillet, 360g carcass
- 1410 LOL-RB-03, 420mm total length, 660g total, 340g fillet, 390g carcass
- 1430 LOL-RB-16, 410mm total length, 650g total, 328g fillet, 316g carcass
- 1447 LOL-RB-19, 380mm total, 650g total, 308g fillet, 308g carcass
- 1450 LOL-RB-04, 400mm total, 510g total, 252g fillet, 264g carcass

Location Superior / Missoula, MT

Date 6/21/19

Project / Client Snurfit SRC

Scale

Temp ID	Sample ID	Date	Time
STR-RB-20	STR-RB-FT-01-C2	6/20/19	1130
STR-RB-10	STR-RB-FT-02-C2		
STR-RB-09	STR-RB-FT-03-C2		
STR-RB-17	STR-RB-FT-04-C2		
STR-RB-16	STR-RB-CT-05-C2		
STR-RB-13	STR-RB-FT-01-C3		
STR-RB-14	STR-RB-CT-02-C3		
STR-RB-19 ^{SG}	STR-RB-FT-03-C3		
STR-RB-08	STR-RB-CT-05-C3		
STR-RB-01	STR-RB-FT-04-C3		
STR-RB-07	STR-RB-FT-05-C3		
STR-RB-04	STR-RB-CT-01-C4		
STR-RB-05	STR-RB-FT-02-C4		
STR-RB-06	STR-RB-FT-03-C4		
STR-RB-02	STR-RB-CT-04-C4		
STR-RB-03	STR-RB-FT-05-C4		
COL-RB-15 ^{SG}	COL-RB-FT-06-C4	6/21/19	1030
COL-RB-01	COL-RB-CT-02-C4		
COL-RB-06	COL-RB-FT-01-C4		
COL-RB-15	COL-RB-CT-01-C4		
COL-RB-17	COL-RB-FT-06-C4		
COL-RB-20	COL-RB-FT-04-C4		
COL-RB-12	COL-RB-CT-04-C4		
COL-RB-19	COL-RB-FT-01-C4		
COL-RB-14	COL-RB-CT-02-C4		
COL-RB-10	COL-RB-FT-03-C4		
COL-RB-02	COL-RB-CT-05-C4		
COL-RB-16	COL-RB-FT-04-C4		
COL-RB-18	COL-RB-FT-01-C4		
COL-RB-05	COL-RB-CT-02-C4		
COL-RB-13	COL-RB-FT-03-C4		

Rite in the Rain

14 Location Missoula/Superior, MT Date 6/20/19

Project / Client Smurfit SRC

R. Jordan, J. Welch, S. Corzett

- 1510 LOL-RB-13. 400 mm total length, 630g total, 312g fillet, 306g carcass
1535 LOL-RB-14. 385 mm total, 590g total, 302g fillet, 286g carcass
1310 LOL-RB-01. 380 mm total, 570g total, 205g fillet, 252g carcass
1320 LOL-RB-02. 370 mm total, 274g fillet, 530g total, 250g carcass
1550 LOL-RB-16. 355 mm total, 310g total, 248g fillet, 234g carcass
1605 LOL-RB-06. 355 mm total, 480g total, 24kg fillet, 244g carcass
1615 LOL-RB-09. 315 mm total, 380g total, 186g fillet, 150g carcass
1630 LOL-RB-12. 310 mm total, 290g total, 148g fillet, 130g carcass
1645 LOL-RB-17. 305 mm total, 330g total, 140g fillet, 136g fillet
1700 LOL-RB-15. 300 mm total, 290g total, 120g fillet, 132g carcass
1715 LOL-RB-05. 300 mm total, 290g total, 136g fillet, 118g carcass
1 Small abrasion on left side
1730 LOL-RB-08. 280 mm total, 260g total, 120g fillet, 106g fillet
1745 LOL-RB-07. 270 mm total, 210g total, 92g fillet, 92g carcass
1800 LOL-RB-18. 255 mm total, 78g fillet, 210g total, 8kg carcass
1815 LOL-RB-11. 258 mm total, 180g total, 72g fillet, 96g carcass
1825 Begin cleaning up lab.
1845 Depart field office for the day.

4 hours

Location Missoula/Superior, MT Date 6/21/19

Project / Client Smurfit SRC

Scale

Temp ID	Sample ID	Date	Time
C0G-RB-08	C0G-RB-FT-04-C3	6/21/19	1030
C0G-RB-09	C0G-RB-CT-04-C3		
C0G-RB-07	C0G-RB-FT-05-C3		
C0G-RB-11	C0G-RB-CT-01-C4		
C0G-RB-03	C0G-RB-FT-01-C4		
C0G-RB-04	C0G-RB-FT-04-C4		
C0G-NP-01	C0G-NP-FT-01-C1		
FRN-RB-20	FRN-RB-FT-05-C1		
FRN-NP-20	FRN-NP-FT-04-C1		
FRN-NP-18	FRN-NP-CT-04-C1		
FRN-NP-19	FRN-NP-FT-03-C1		
FRN-NP-16	FRN-NP-FT-05-C2		
FRN-NP-17	FRN-NP-CT-03-C2		
FRN-NP-15	FRN-NP-CT-05-C2		
FRN-NP-14	FRN-NP-CT-03-C2		
FRN-NP-12	FRN-NP-FT-01-C2		
FRN-NP-02	FRN-NP-FT-02-C2		
FRN-NP-13	FRN-NP-CT-02-C2		
FRN-NP-10	FRN-NP-FT-01-C3		
FRN-NP-11	FRN-NP-FT-03-C3		
FRN-NP-04	FRN-NP-CT-03-C3		
FRN-NP-05	FRN-NP-FT-04-C3		
FRN-NP-09	FRN-NP-CT-01-C4		
FRN-NP-08	FRN-NP-FT-02-C4		
FRN-NP-06	FRN-NP-CT-02-C4		
	FRN-NP-FT-05-C4		
	FRN-NP-CT-03-C4		
	FRN-NP-FT-04-C4		
	FRN-NP-CT-01-C4		
	FRN-NP-FT-05-C4		
	FRN-NP-CT-05-C4		

6/21/19

1030

1030

4 hrs

Rate in the rain

16 Location Superior / Missoula, MT

Date 6/21/19

Project / Client Smurfit SRC

R. Jordan, S. Grant, J. Witch

730 Arrive at field office. Prep for sampling. MIS = Missoula River RB = rainbow trout FT = fillet tissue CT = carcass tissue C = composite Water Body is Clark Fork River Sample date 6/21/19 Time 1330. Scaled fish rinsed w/ distilled water & fillets rinsed w/ ASTM Type I.

735- MIS-RB-12. 450mm total length. 840 g total, 309 g fillet, 508 g carcass

750 MIS-RB-16. 435 mm total length. 679 g fillet, 690 g total, 414 g carcass

7815 MIS-RB-15. 435mm total length. 940 g total, 442 g fillet, 444 g carcass

7830 MIS-RB-14. 395 mm total length. 610g total, 312 g fillet, 349 g carcass

7850 MIS-RB-18. 360mm total length. 580 g total, 249 g fillet, 278 g carcass

7910 MIS-RB-17. 360mm total length. 670 g total, 246 g fillet, 264 g carcass

7930 MIS-RB-08. 372 mm total length. 580 g total, 286 g fillet, 282 g carcass

7945 MIS-RB-05. 370 mm total length. 440 g total, 226 g fillet, 232 g carcass

71000 MIS-RB-11. 350mm total length. 530g total, 251g fillet, 238g carcass

71010 MIS-RB-16. 352mm total length. 240g fillet, 490g total, 230g carcass

7030 MIS-RB-01. 350mm total length. 444g total, 244g fillet, 240g carcass

71045 MIS-RB-19. 334mm total length. 418g total, 218g fillet, 198g carcass

7100 MIS-RB-09. 314 mm total length. 348g total, 168g fillet, 170g carcass

71115 MIS-RB-02. 320 mm total length. 402g total, 176g fillet, 228g carcass

7130 MIS-RB-20. 362 mm total length. 282g total, 138g fillet, 142g carcass

7145 MIS-RB-04. 286 mm total length. 274g total, 126g fillet, 142g carcass

7155 MIS-RB-07. 294 mm total length. 117g fillet, 308g total, 187g carcass

71210 MIS-RB-13. 258 mm total length. 242g total, 126g fillet, 116g carcass

71220 MIS-RB-02. 276 mm total length. 214g total, 110g fillet, 102g carcass

71235 MIS-RB-10. 264 mm total length. 196g total, 96g fillet, 98g carcass

Location Superior, MT

Date 6/21/19

Project / Client Smurfit SRC

R. Jordan, S. Grant, J. Witch

1130 Prep lab w/so for next reach to take lunch break
1140 Begin resection on next reach. STR = St. Regis reach
RB = rainbow trout FT = fish tissue CT = carcass tissue
C = composite Water body ~ Clark Fork River
Sample date = 6/20/19 Sample time = 1130

STR-RB-19. 428 mm total length. 708 g total, 346g fillet, 362g carcass

1145 STR-RB-15. 470 mm total length. 674g total, 302g fillet, 352g carcass
Note that beginning w/ MIS-RB-01 that the food scale was used for weights instead of the hanging scale to weigh fish due to discrepancies in combined fillet + carcass weights w/ whole total weight

1150 STR-RB-18. 410 mm total length. 672g total, 330g fillet, 340g carcass

1160 STR-RB-11. 416 mm total length. 670g total, 349g fillet, 326g carcass

1160 STR-RB-12. 390 mm total length. 592g total, 302g fillet, 290g carcass

1170 STR-RB-20. 380 mm total length. 582g total, 242g fillet, 258g carcass

1170 STR-RB-10. 386 mm total length. 604g total, 306g fillet, 298g carcass

1180 STR-RB-09. 370 mm total length. 584g total, 276g fillet, 258g carcass

1180 STR-RB-17. 364 mm total length. 520g total, 259g fillet, 261g carcass

1190 STR-RB-16. 356 mm total length. 504g total, 218g fillet, 286g carcass

1195 STR-RB-13. 359 mm total length. 460g total, 219g fillet, 244g carcass

1110 STR-RB-14. 354 mm total length. 448g total, 238g fillet, 214g carcass

1110 Begin cleaning up lab for the day.

1145 Depart field office for the day.

Handwritten Signature
6/21/19

Rite in the Rain

18 Location Superior, MT Date 6/22/19
Project / Client Smurfit SRC

S.Grant, R.Bordan, J.Wilch

- 730 Arrive at field office. Prep of the day.
745 Begin resections. Reseave samples from STR reach.
STR-RB-08. 360 mm total length. 436g total, 220g fillet, 216g carcass
755 STR-RB-01. 360 mm total, 422g total, 224g fillet, 196g carcass
810 STR-RB-07. 350 mm total, 450g total, 248g fillet, 206g carcass
825 STR-RB-04. 349 mm total, 410g total, 228g fillet, 178g carcass
835 STR-RB-05. 318 mm total, 402g total, 206g fillet, 192g carcass
9 850 STR-RB-06. 318 mm total, 350g total, 204g fillet, 192g carcass
9 905 STR-RB-02. 280 mm total, 254g total, 178g fillet, 116g carcass
1 915 STR-RB-03. 288 mm total, 252g total, 194g fillet, 104g carcass
1 930 Clean up after STR. Rewrap tables & prep for COG.
11 940 Begin resections of COG reach. COG = Council Grove branch
11 RB = Rainbow trout. Water body = Clark Fork River Date 6/22/19
11 Time 10:30. All scaled fish rinsed w/ distilled water & filleted
11 fillets w/ ASTM Tappel. COG-RB-06. 420 mm total, 784g total
422g fillet, 356g carcass. Puncture of skin at left side of fish.
11 955 COG-RB-15. 420 mm total, 746g total, 402g fillet, 338g carcass
1015 COG-RB-17. 432 mm total, 800g total, 430g fillet, 368g carcass
1025 COG-RB-20. 410 mm total, 636g total, 318g fillet, 316g carcass
1040 COG-RB-12. 410 mm total, 596g total, 318g fillet, 278g carcass
1050 COG-RB-19. 406 mm total, 628g total, 340g fillet, 286g carcass
11 105 COG-RB-14. 404 mm total, 682g total, 392g fillet, 288g carcass
11 1120 COG-RB-10. 386 mm total, 598g total, 314g fillet, 284g carcass
11 1130 COG-RB-2. 374 mm total, 528g total, 308g fillet, 210g carcass
11 1140 COG-RB-16. 374 mm total, 518g total, 292g fillet, 218g carcass

- Location Superior, MT Date 6/22/19
Project / Client Smurfit SRC
R.Bordan, S.Grant, J.Wilch
1100 COG-RB-18. 360 mm total, 504g total, 280g fillet, 220g carcass
1105 Break for lunch
1110 Return from lunch.
1115 COG-RB-05. 358 mm total, 464g total, 264g fillet, 200g carcass
1120 COG-RB-13. 330 mm, 370g total, 208g fillet, 158g carcass
1125 COG-RB-08. 316 mm total, 318g total, 178g fillet, 140g carcass
1130 COG-RB-09. 310 mm total, 316g total, 180g fillet, 136g carcass
1135 COG-RB-07. 284 mm, 238g total, 126g fillet, 108g carcass
1140 COG-RB-11. 280 mm total, 256g total, 130g fillet, 122g carcass
1145 COG-RB-03. 266 mm total, 192g total, 66g fillet, 86g carcass
1150 COG-RB-04. 264 mm total, 180g total, 74g fillet, 84g carcass
1155 COG-RB-01. 258 mm total, 180g total, 100g fillet, 74g carcass
1160 Complete resections at COG-RB. Clean all instruments & tables. Rewrap with foil. Refill all rinse containers.
1165 Return FRN-NP. FRN = Frenchtown reach NP = northern part. FT = fillet tissue CT = carcass tissue Waterbody = Clark Fork
1170 COG-RB-12. All scaled fish rinsed w/ distilled & filtered w/ Tappel
FRN-NP-20. 1020 mm total, 8180g, 4042g fillets, 4072g carcass
External organs nicked. 1 fillet also dropped in fish waste bucket.
FRN-NP-18. 850 mm total, 4980g total, 2552g fillet, 2228g carcass
FRN-NP-19. 820 mm total, 5950g total, 2286g fillet, 2906g carcass
FRN-NP-16. 760 mm total, 2170g total, 1354g fillet, 1286g carcass
FRN-NP-17. 780 mm total, 3120g total, 1714g fillet, 1958g carcass
Pushed intestine during processing & rinsed w/ Tappel. Had partially digested fish & stomach that was replaced w/ carcass
1175 FRN-NP-15. 760 mm total, 2930g total, 1458g fillet, 1382g carcass
1180 Clean up field office for night. Clean & rewarp tables for tomorrow.
1185 Depart field office for hotel.
- J.Wilch
6/22/19
Note in the Rain

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Location Superior, MT

Date 6/23/19

Project / Client Smurfit SRC

R. Jordan, S. Grant, J. Wilch

- 730 Arrive at field office. Prep for resections
- 740 FRN-NP-14. 750mm total, 3820g total, 1668g fillet, 2018 carcass
Small fish in stomach included w/ carcass
- 807 FRN-NP-12. 764mm total, 3250g total, 1586g fillet, 1592 carcass
- 818 FRN-NP-02. 684mm total, 2030g total, 987g fillet, 943g carcass
- 835 FRN-NP-13. 762mm total, 2820g total, 1500g fillet, 1578g carcass
- 846 FRN-NP-10. 719mm total, 2320g total, 1142g fillet, 1050g carcass
- 904 FRN-NP-11. 680mm total, 2130g total, 1078g fillet, 920g carcass
- 925 FRN-NP-01. 610mm total, 1900g total, 846g fillet, 824g carcass.
Small abrasion on top of head.
- 935 FRN-NP-05. 600mm total, 1870g total, 812g fillet, 952g carcass
- 950 FRN-NP-09. 590mm total, 1570g total, 732g fillet, 772g carcass
- 1005 FRN-NP-03. 550mm total, 1350g total, 630g fillet, 618g carcass
- 1010 FRN-NP-07. 560mm total, 1350g total, 656g fillet, 670g carcass
- 1040 FRN-NP-08. 558mm total, 1410g total, 584g fillet, 752g carcass
- 1100 FRN-NP-06. 556mm total, 1300g total, 480g fillet, 779g carcass
- 1140 FRN-RB-20. 412mm total, 344g total, 314g fillet, 374g carcass
- 1190 Decon tables & rewrap prior to resection at FRN-RB
- 1215 Break for lunch
- 1245 Return from lunch. Clean tables, begin cleaning rest of field office. Start packing up supplies that can be returned to Walmart or Cabela's. Bag trash to begin CoCs. Group composites together in bags in the cooler.
- 1445 Depart field office for the day.

Rite in the Rain

Date

6/24/19

21

Location Superior, MT

Date

6/24/19

Project / Client Smurfit SRC

R. Jordan, S. Grant, J. Wilch

See other log book for composite sample table. Superior field office work complete.

~~FRN~~